

**CLAIMS**

1           1. A method for automating processing of scan data files generated by a  
2 digital image scanner, comprising:

3           selecting, at the scanner, a specific scan job type from a list of pre-  
4 defined scan job types, each scan job type having pre-specified properties;

5           scanning one or more documents according to properties of said  
6 specific scan job type, thereby generating a file of scan data;

7           automatically synthesizing a scan data file including scan data  
8 generated during the scanning step and meta data relating to properties of  
9 said specific scan job type;

10          transmitting the scan data file to an image server;

11          automatically analysing, upon reception of the scan data file in the  
12 image server, the scan data file as to the data contained therein; and

13          automatically further processing the scan data file in a way specified by  
14 said meta data contained therein.

1           2. The method according to claim 1, further comprising:

2           pre-defining a scan job type, including specifying properties for said  
3 scan job type;

4           transmitting a scan job type definition thus made to the scanner; and

5           upon reception of a scan job type definition at the scanner, including  
6 said scan job type definition in the list of scan job types.

1           3. The method according to claim 2, further comprising:

2           transmitting said scan job type definition to the image server and  
3 installing said scan job type therein, for reference when a scan data file is  
4 analysed.

1        4. The method according to claim 1, wherein  
2        said meta data contained in a synthesized scan data file includes an  
3        application selector string which specifies said way of further processing of  
4        that scan data file.

1        5. The method according to claim 1, further comprising:  
2        automatically synthesizing a file name for a scan data file, said file  
3        name including at least part of said meta data.

1        6. The method according to claim 1, wherein said further processing  
2        includes displaying said scan data file on a display screen.

1        7. The method according to claim 1, wherein said further processing  
2        includes storing said scan data file in a specified database.

1        8. The method according to claim 1, wherein said further processing  
2        includes submitting said scan data file to a printer for printing.

1        9. The method according to claim 1, wherein,  
2        in said scanning step, scan data are generated according to  
3        specifications specified by the properties of the selected scan job type.

1        10. The method according to claim 1, wherein  
2        said properties of a scan job type include the requirement of a job  
3        number being given for a scan job, and wherein,  
4        before a scan job of said type is started, an operator is asked to enter a  
5        job number for that job, and said job number is automatically included in  
6        said meta data contained in the scan data file generated.

1 11. A method for use in a networked scanner device, in which  
2 documents are scanned thereby generating scan data and in which  
3 generated scan data are uploaded to a server via a network, said method  
4 comprising:

5 scanning a document to generate scan data; and

6 automatically generating a composite scan data file that includes the  
7 generated scan data and composite meta data comprising an application  
8 selector code which specifies a further processing step in said server for  
9 further processing the scan data.

1 12. The method according to claim 11, also comprising:  
2 automatically generating a file name for said scan data file, said file  
3 name including at least part of said composite meta data.

1 13. The method according to claim 11, further comprising:  
2 storing generic composite meta data including an application selector  
3 code,

4 completing, by an operator, said generic composite meta data by  
5 entering additional identification data,

6 forming specific composite meta data based on said generic composite  
7 meta data and said additional identification data entered by the operator,  
8 and

9 scanning a document thereby generating a scan data file including said  
10 specific composite meta data.

1 14. The method according to claim 11, further comprising:

2 storing at least two different sequences of generic composite meta data,  
3 each relating to a respective scan job type and including a different  
4 application selector code,

5 presenting for selection said respective scan job types to an operator of  
6 the scanner device,  
7 selection, by the operator, of one of said scan job types,  
8 scanning a document thereby generating a scan data file including a  
9 specific sequence of composite meta data based on the generic sequence of  
10 composite meta data of a scan job type selected by the operator.

1 15. The method according to claim 14, further comprising  
2 receiving identity information of an operator;  
3 wherein, in the storing step, sets of at least one scan job type for each  
4 of a plurality of users are stored, and wherein, upon receiving said identity  
5 information of said operator, the set of scan job types of that operator is  
6 presented in the presenting step.

7 16. The method according to claim 14, wherein:  
8 said identity information of an operator is inputted at the scanner  
9 device, and only said set of scan job types of that operator is presented.

1 17. The method according to claim 14, wherein:  
2 said identity information of an operator is inputted at a remote site  
3 connected to the scanner, and  
4 said set of scan job types of that operator is presented at the scanner  
5 device for a predetermined time interval.

1 18. The method according to claim 15, further comprising:  
2 defining, at a remote site, a scan job type having a sequence of generic  
3 composite meta data including an application selector code and possibly  
4 data fields to be completed by an operator, and  
5 downloading said defined scan job type and the related sequence of

6 generic composite meta data to the scanner device for use in said device.

1 19. An apparatus for use in a networked scanner device, in which  
2 documents are scanned thereby generating scan data and in which  
3 generated scan data are uploaded to a server via a network, said apparatus  
4 comprising:

5 a scan data generator to generate scan data for a document; and

6 a unit to automatically generate a composite scan data file including  
7 the generated scan data and meta data including an application selector  
8 code which specifies a further processing step in said server for further  
9 processing the scan file.

1 20. The apparatus according to claim 19, further comprising:

2 a unit to store generic composite meta data, including an application  
3 selector code,

4 a unit to enter, by the operator, additional identification data to  
5 complete said generic composite meta data,

6 a unit to form a specific composite scan data file based on said generic  
7 composite meta data and said additional identification data entered by the  
8 operator, and

9 a unit to scan a document thereby generating a scan data file including  
10 said specific composite meta data.

1 21. The apparatus according to claim 19, further comprising:

2 a unit to store at least two different sequences of generic composite  
3 meta data, each relating to a respective scan job type and including a  
4 different application selector code,

5 a unit to present for selection said respective scan job types to an  
6 operator of the scanner device,

7 a unit to select, by the operator, of one of said scan job types,  
8 a unit to scan a document thereby generating a scan data file including  
9 specific composite meta data based on the generic composite meta data of  
10 the scan job type selected by the operator.

1 22. The apparatus according to claim 21, further comprising:  
2 a unit for receiving identity information of an operator, and  
3 wherein  
4 said unit to store generic composite meta data stores sets of at least  
5 one scan job type for each of a plurality of users, and wherein  
6 said unit to present scan job types for selection is connected to said  
7 unit for receiving identity information of an operator so as to present, upon  
8 receiving said identity information of an operator, the set of scan job types of  
9 that operator.

1 23. The apparatus according to claim 22, wherein  
2 said unit for receiving identity information of an operator is operable to  
3 input identity information of an operator at the scanner device, and  
4 said unit to present scan job types for selection is operable to present  
5 the set of scan job types of that operator only.

1 24. The method according to claim 22, wherein  
2 said unit for receiving identity information of an operator is connected  
3 to a remote site for inputting identity information of an operator, and  
4 said unit to present generic composite scan file names for selection is  
5 operable to present the set of scan job types of that operator at the scanner  
6 device for a predetermined time interval.

1        25. The apparatus according to claim 21, further comprising:

2        a unit to define, at a remote site, a scan job type including a sequence  
3 of generic composite meta data including an application selector code and  
4 possibly data fields to be completed by an operator, and

5        a unit to download said defined scan job type including said sequence  
6 of generic composite meta data to the scanner device for use in said device.

1        26. A data structure for use in a memory of a networked scanner  
2 device, in which documents are scanned thereby generating a scan file and  
3 in which a generated scan file is uploaded to a server via a network, said  
4 scan file including said data structure comprising:

5        an image data object to specify image contents of one or more scanned  
6 documents of said scan file, and

7        a meta data object, linked to the image data object, to identify  
8 composite meta data at least including an application selector code which  
9 specifies a further processing step in said server for further processing the  
10 scan file.

1        27. The data structure according to claim 26, further comprising:

2        an extra data object, linked to one of said image data object and said  
3 meta data object, to specify additional identification data of the scan file.

1        28. A generic data structure for use in a memory of networked scanner  
2 device, in which documents are scanned thereby generating a scan file and  
3 in which a generated scan file is uploaded to a server via a network, said  
4 scan file in said memory including said data structure comprising:

5        a first section for accommodating image data specifying image contents  
6 of one or more scanned documents,

7        a second section, linked to said first section, for accommodating

8 composite meta data at least including a predefined application selector  
9 code which specifies a further processing step in said server for further  
10 processing the scan file and further including operator-completable  
11 additional identification data.

1 29. An article of manufacture comprising a computer readable medium  
2 having embedded thereon a computer program to be processed by a  
3 computer that is connected, via a network, to a scanner device for scanning  
4 documents thereby generating a scan file and for uploading a generated  
5 scan file to a server via said network, said computer-readable-medium-  
6 embodied program comprising:

7 a first segment to define generic composite meta data including an  
8 application selector code field, and

9 a second segment to download said defined generic composite meta  
10 data to the scanner device for use in said device.

1 30. The article of manufacture according to claim 29, wherein said first  
2 segment is also operable to define said generic composite meta data so as to  
3 include at least one data field to be completed by an operator at the scanner  
4 device.